long, and had evidently been washed into this habitat from some region along shore.

Galba humilis modicella (Say). Found in two habitats, one a lagoon among floating algæ (Oedogonium) and the other in Tuttle Brook, a tributary of Chittanango Creek, near the shore, in a few inches of water among the algæ Oedogonium and Cladophora. In the latter the mollusks were very abundant crawling on the shore at the margin of the water.

## SUCCINEIDAE.

Succinea retusa Lea. Small specimens of this species were very abundant along the shore at Becker's landing, crawling over the rocks on the shore near the margin of the lake.

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## NEW LAND SHELLS FROM CALIFORNIA AND NEVADA.

H. A. PILSBRY AND JAS. H. FERRISS.

EPIPHRAGMOPHORA CALLISTODERMA n. sp. Pl. 7, fig. 3.

The shell is narrowly umbilicate, thin, cinnamon-brown, fading on the base to tawny olive, having a chesnut-brown band at the shoulder, with a wide border below and a narrow one above of olive buff. Sculpture of inconspicuous growth-wrinkles, and under the microscope, it is seen to be set with rounded pustules in high relief (about 35 in a square mm. on the upper part of the last whorl); they are rather irregularly arranged, along the growth-wrinkles the surface between pustules having very beautiful fine and close sculpture of wrinkles, which are parallel in spiral bands on the shell, elsewhere irregular and interrupted. This gives the shell a many-banded appearance, in certain lights.

Whorls nearly  $5\frac{1}{2}$ , narrow and closely wound, the last relatively very wide, broadly rounded peripherally, descending a little in front. The aperture is large, oblique, margins but slightly expanding, at the columella dilated partly over the umbilicus. Alt. 16, diam. 23 mm. oblique alt. of aperture 13, width 14 mm.

Margin of Kern River 2 miles north of Bakersfield, Tulare Co., Cal., on an island formed by an irrigation ditch; on dead vegetation at the water's edge. Collected by Ferriss and Hand, July 1, 1916.

This species differs from all forms of *E. mormonum* and *E. hillebrandi* by its much smaller umbilieus, far wider spire, and the more inflated last whorl. The embryonic whorls of the two species mentioned are densely papillose, while the new form has a pattern of close, irregularly radial wrinkles. It is not closely related to any other species known to us.

# Oreohelix handi n. sp.

A member of the O. hemphilli group. The shell is thin, depressed, very strongly keeled throughout, irregularly striate, decussated by spiral lines producing a rather indistinct granulation. On the other base there are spiral series of granules. In young shells and mostly adults, there are short cuticular processes on the granules and at the periphery. There are 41 whorls. The first 13, forming the embryonic shell, are strongly convex, the first whorl almost smooth, after which a few radial ripples appear. The first part, embryonic whorl, is very convex but begins to be impressed near the periphery. Subsequently the whorls are excavated on both sides of the suture, and the last one is concave above and below the peripheral keel. In fact it descended a little below the keel. The umbilicus is rather large and funicular. Aperture rather small, the margins converging, thin. There is a band of dark livid brown above and one close below the keel, the rest of the upper surface being clouded or suffused with the same color with lighter patches and streaks; keel usually whitish. Alt. 5.7, diam. 10.2 mm.

Charleston Mountain, Lincoln Co., Nevada. This is about 30 miles north of Las Vegas, Nevada. Collecting was done for about a mile southward from Griffith's Hotel, the elevation about 9000 to 9500 ft.

This species is related to O. hemphilli and O. eurekensis, but differs from both by its more depressed, much more strongly keeled form. O. hemphilli is also much larger and more solid. Its locality is about 200 miles northeast from Charleston

Mountain. Whether these three forms will eventually be ranked as species or *eurekensis* and *handi* as subspecies of *hemphilli* cannot be determined definitely until further collections are made in Nevada and western Utah. At the present time, there is no evidence of intergradation, yet the territory where such evidence would be looked for is wholly unexplored.

Some hundreds of specimens were collected. There is slight variation in sculpture, but very little in form.

Vallonia cyclophorella Ancev.

A race which may be called *V. c. septuagentaria* P.&F. was taken at Bubb's Creek Falls, Tulare Co. It has fully 70 ribs on the base. Alt. 1.25, diam. 3 mm.

## A SUMMER'S COLLECTION AT FRIDAY HARBOR, WASHINGTON.

### BY T. S. OLDROYD.

Mrs. Oldroyd and myself had the pleasure of spending our vacation at the marine biological station of the University of Washington at Friday Harbor, San Juan Co., Washington. This group of islands, so wonderful in their wild beauty, is situated between the Strait of Fuca and the Strait of Georgia, north of Port Townsend. The San Juan group comprises more than 100 islands of varying sizes, the most important being San Juan, noted as having been the scene of the last struggle between the British and Americans in the boundary-line dispute from 1852 to 1872; the ruins of the old English camp and blockhouse still remain near Roach Harbor. Friday Harbor, the chief town of the islands, is the county seat of San Juan Co. which includes all the islands of the group. The town is situated on a beautiful bay and is the shipping-point for a large area of unsurpassed agricultural land. They have also one or two large salmon canneries. The islands are nearly all high and prominent and covered with a dense growth of trees, mostly fir. Mount Constitution on Orcus Island is the highest point. From its summit, 2094 feet above the sea, is the finest view to be obtained anywhere of the great panoramic picture of Puget Sound. The